Scott H. Zwillinger (019645) 1 ZWILLINGER WÜLKAŃ, PLC 2020 North Central Avenue, Suite 675 2 Phoenix, Arizona 85004 Tel: (602) 962-0207 3 Fax: (602) 962-0207 Email: scott.zwillinger@zwfirm.com 4 Attorney for Plaintiffs 5 UNITED STATES DISTRICT COURT 6 DISTRICT OF ARIZONA 7 Robert Steven Cutler, et al., 8 Case No. 18-CV-00383-JCH 9 Plaintiffs. MOTION TO EXCLUDE TESTIMONY OF DR. LOVECCHIO RE: LSD NTOXICATION AND EFFECT ON 10 v. **BODY TEMPERATURE** 11 Chris Nanos, Sheriff Pima County, et al., 12 Defendants. 13 14 Plaintiffs seek to exclude any testimony of Defendants' expert, Dr. Frank LoVecchio (or 15 any other witness), to the effect that the LSD in David's system caused hyperthermia or excited 16 delirium because it was still psychoactive and in so doing contributed to David's death. Dr. 17 LoVecchio offers no specific facts, studies, or peer reviewed literature to support either opinion; 18 rather, his *ipse dixit* conclusory statements about LSD, hyperthermia, and excited delirium are 19 based on nothing more than his subjective belief coupled with unsupported speculation. 20 Moreover, the speculative nature of Dr. LoVecchio's opinions are confirmed by the testimony 21 of the Pima County Medical Examiner who testified that he "does not know how much the LSD 22 contributed" to David's death. Accordingly, the opinions of Dr. Lovecchio on LSD do not satisfy 23 Daubert and the Court should exclude them. 24 25 I. Opinions about LSD and hyperthermia. 26 This case arises out of the death of 23-year-old David Cutler after he was found wandering 27 naked and disoriented in the desert heat in June 2017. Plaintiffs contend that David was 28

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experiencing heatstroke after wandering exposed to the heat for approximately two hours with no water or shelter, and that rather than treating his heatstroke, paramedic Grant Reed injected him with a dangerous amount of Ketamine in violation of his standing orders, which then caused respiratory depression and ultimately death.

Toxicology results revealed a miniscule amount of LSD (0.12 ng/ml) in David's system.
Attempting to capitalize on this fact, Defendants' expert, Dr. Frank LoVecchio, makes the following conclusory statement in his report: "In my professional opinion, the LSD present in Mr. Cutler's system during the subject incident . . . more likely than not, raised his body temperature and caused hyperthermia in the Decedent." Report of Dr. Frank LoVecchio, attached as **Exhibit A**, at 4. But Dr. LoVecchio offers no facts, studies, literature or anything else to support this statement. Notably, he authored an article titled "Influence of Drug Use on Morbidity and Mortality in Heatstroke," in which he discussed the effects of various legal and illegal substances on patients with heatstroke, but *LSD is not one of the substances identified in the article*. What's more, Dr. LoVecchio says the very same thing about the caffeine in David's system, while also conceding, as he must, that David's exposure to the desert heat was "the most important factor" in causing David's hyperthermia. *Id*.

Plaintiffs' expert, Dr. Stephen Thornton, has opined that the amount of LSD in David's system was insufficient to have caused his death, but unlike Dr. LoVecchio, Dr. Thornton provides support for that opinion. As Dr. Thornton explained: "Deaths from LSD are rare, with some literature stating there is 'not a single documented death due to LSD at recreational doses' (Nichols). In my 7 years as a medical toxicologist and poison control center medical director, I have not seen any deaths associated with LSD." Report of Plaintiffs' Expert Dr. Stephen Thornton, M.D., attached as **Exhibit B**, at Thornton000014. What's more, the LSD levels in David's system were approximately 100 times lower than those observed in patients who have

For reference, 0.1 ng is 0.0000000001g or 0.1 millionth of a milligram.

http://www.researchgate.net/profile/Frank_Lovecchio/publication/221976348_Influence_of_Drug_Use_on_Morbidity_and_Mortality_in_Heatstroke/links/54297d460cf238c6ea7f6e1b/Influence-of-Drug-Use-on-Morbidity-and-Mortality-in-Heatstroke.pdf?origin=publication_detail

overdosed on LSD, and 30 times lower than levels given to patients in studies, who experienced mild symptoms and did not "manifest significant toxicity." *Id.* And in another scientific study, amounts of LSD *10-30 times higher* than the amount in David's system correlated to only a 1.8 degree rise in body temperature, contrasted with the 4.2 degree rise in David's temperature caused by the "most important factor," the desert heat. Exhibit 2 at Thornton000015. Thus, it is pure speculation unsupported by any scientific study or evidence to identify the LSD as a cause or contributor to David's hyperthermia. Conversely, the prejudicial effect of letting the jury believe that the LSD in David's system caused the hyperthermia is enormous and obvious.

Indeed, Dr. David Winston, the Pima County Medical Examiner who conducted David's autopsy, admitted at his deposition that he did not and could not know whether the LSD contributed at all to David's death. Specifically, Dr. Winston testified that he does not "know how much the LSD contributed" to David's death. Deposition of David Winston, attached as **Exhibit C**, at 84:15-24. Likewise, Dr. Winston testified that the time at which David allegedly ingested LSD, the length of time the LSD would have been psychoactive, and the amount that he took, is unknowable. *Id.* at 77:1-5; 76:20-25.

And although Dr. Winston testified that LSD *can* cause hyperthermia, he also testified that he could not say whether David's hyperthermia was caused 50 percent by the two hours he had spent wandering in the desert, and 50 percent by the LSD, or 75 percent by the desert exposure and 25 percent by the LSD, or even 99 percent by the desert exposure and 1 percent by the LSD. *Id.* at 80:15-24. He even conceded that the LSD may not have raised David's body temperature at all. *Id.* at 81:12-14. Thus, it is nothing but pure speculation to identify the LSD as a cause or contributor to David's hyperthermia and death.

II. Opinions about LSD and excited delirium.

Dr. LoVecchio also opines: "In my professional opinion, the LSD... caused the Decedent to experience signs of excited delirium, anxiety or fearfulness, paranoid thinking, physical or psychological discomfort, impaired judgment, and an altered mental state." *See* Exhibit A at 4. But as with his opinions about LSD and hyperthermia, Dr. LoVecchio offers no facts, studies,

literature or anything else to support his obvious suggestion that the LSD was still causing psychoactive effects more than seven hours after David supposedly experienced the peak effects of LSD, and, as explained above, there is simply no evidence that LSD is a deadly drug or a drug that leads to deadly physiological reactions--particularly at the miniscule levels in which it was found in David's blood. Indeed, Dr. Winston does not mention excited delirium anywhere in his autopsy report, or attribute David's death in any degree to excited delirium caused by LSD or any other substance.

Equally important, and as Dr. Thornton will testify, the psychoactive effects of LSD typically last for 6 hours at most, and the evidence strongly suggests that he would no longer have been exhibiting any such psychoactive effects when law enforcement encountered him more than seven hours after he supposedly felt the peak effects. Exhibit B at Thornton000014. Here, Dr. LoVecchio is merely speculating that David was still feeling the effects of LSD, which in turn caused excited delirium hours later. Again, Drs. Thornton and Winston contradict Dr. LoVecchio's *ipse dixit* opinion, and, not surprisingly, Dr. LoVecchio offers no support for his opinion.

III. The Daubert standard.

For expert testimony to be admissible, it must be both reliable and relevant. Fed. R. Evid. 702; *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 589 (1993). If the expert's testimony fails to meet either requirement, the testimony is subject to exclusion. *Stilwell v. Smith & Nephew, Inc.*, 482 F.3d 1187, 1192 (9th Cir. 2007). Significantly, the proponent of the expert testimony bears the burden of proving that the testimony is sufficiently reliable to be admissible under Rule 702 and *Daubert. Allen v. Am. Cap. Ltd.*, 287 F. Supp. 3d 763, 776 (D. Ariz. 2017).

An expert is not permitted to simply give an opinion based on his "subjective belief or unsupported speculation." *Daubert*, 509 U.S. at 590; *General Electric Co. v. Joiner*, 522 U.S. 136, 146 (1997). "An expert must back up his opinion with specific facts." *Guidroz-Brault v. Mo. Pac. R.R. Co.*, 254 F.3d 825, 831 (9th Cir. 2001) (affirming exclusion of three experts whose opinions were not grounded in fact). If an expert's testimony is not based on sufficient facts, it

should be excluded. Id. at 829-832.

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"The test for reliability is not the correctness of the expert's conclusions but the soundness of his methodology." Stilwell, 482 F.3d at 1192 (quoting Daubert v. Merrell Dow Pharms., Inc., 43 F.3d 1311, 1318 (9th Cir. 1995) ("Daubert II"); Allen, 287 F. Supp. 3d at 777 ("the reliability of an expert's opinion is determined almost exclusively by looking at their decision-making process."). Daubert provided four non-exclusive factors to probe an expert's methodology, but not every factor is relevant in each case. Allen, 287 F. Supp. 3d at 777. When there is no peer review or publications, "the experts must explain precisely how they went about reaching their conclusions and point to some objective source . . . to show that they have followed the scientific method, as it is practiced by (at least) a recognized minority of scientists in their field." Daubert II, 43 F.3d at 1319. "[W]hen an expert opinion is based on data, a methodology, or studies that are inadequate to draw the conclusions contained in the report, Daubert and Rule 702 bar admission of the expert testimony." Shirar v. Guerrero, 2017 WL 6001270, at *8 (C.D. Cal. Aug. 2, 2017) (citing Lee v. Smith & Wesson Corp., 760 F.3d 523, 527 (6th Cir. 2014) ("expert testimony . . . is inadmissible when the facts upon which the expert bases his testimony contradict the evidence.")). And "even otherwise qualified experts may not simply offer conclusory opinions." In re Puda Coal Sec. Inc., Litig., 30 F. Supp. 3d 230, 250 (S.D.N.Y. 2014).

Moreover, specifically in the context of medical opinions, a medical expert "must do more than simply pronounce an opinion that [something] caused a plaintiff's injuries. As the Supreme Court has declared on several occasions, the ipse dixit of the expert as the only connection to the underlying data is insufficient to establish reliability." *In re Zostavax*, 579 F. Supp. 3d 675, 679 (E.D. Pa. 2021).

IV. Dr. LoVecchio's opinions do not satisfy Daubert.

Dr. LoVecchio's opinion connecting the LSD with David's death is nothing more than his "subjective belief" based on "unsupported speculation." What's more, he does not back up that opinion with any "specific facts" or reference to accepted peer reviewed authorities. *Domingo v. T.K*, 289 F.3d 600 (9th Cir. 2002), is instructive. In that case, the plaintiff underwent

1 hip surgery. One of the known complications of hip surgery is a condition called fat embolism 2 3 4 5 6 7 8 9 10 11 12 13

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syndrome ("FES"), where fat particles that are released into the blood stream during the surgery travel to the brain causing severe brain damage and sometimes death. The plaintiff's expert testified that the defendants caused the FES by taking too long to complete the procedure. But the district court found that the expert failed to connect the dots between the extended length of the procedure, caused by difficulties fitting the hip prosthesis into the opening in the femur, and the FES, given that FES can occur even where there is no such delay. The Ninth Circuit Court of Appeals affirmed and explained: "Nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the ipse dixit of the expert." Id. at 607 (internal citations omitted). "A trial court may exclude evidence when it finds that there is simply too great an analytical gap between the data and the opinion proffered." *Id.* And although *Daubert* "does not require that every aspect of a theory of medical causation be supported by research on the identical point," and "it is not necessary to show how a particular act or event caused an injury," there must, however, be "sufficiently compelling proof that the event must have caused the damage somehow." *Id.*

As in *Domingo*, so here, Dr. LoVecchio does not provide sufficiently compelling proof that the LSD caused David's death, particularly where there is another cause of his deathhyperthermia caused by exposure to the desert heat—that Dr. LoVecchio concedes was the primary factor in David's demise; where Dr. LoVecchio even makes the same bald assertion about caffeine; and the medical examiner could not establish causation because it is unknowable. Dr. LoVecchio's bald and unsupported assertion that the LSD in David's system contributed to his hyperthermia and death without reference to specific facts, studies, peer reviewed journals and the like is simply improper under Rule 702 and *Daubert*, and the Court should preclude him from offering testimony consistent with that assertion.

RESPECTFULLY SUBMITTED this 30th day of September, 2022.

ZWILLINGER WULKAN, PLC

By: /s/ Scott H. Zwillinger Scott H. Zwillinger

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CERTIFICATE OF SERVICE

I hereby certify that on September 30, 2022, I caused the foregoing document to be filed electronically with the Clerk of Court through the CM/ECF System for filing; and served on all counsel of record via the Court's CM/EDF system.

/s/ Tricia Jochum